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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**In re Application of:**

Havenga et al.

**Serial No.:** 10/646,449

**Filed:** August 22, 2003

**For:** GENE DELIVERY VECTORS  
PROVIDED WITH A TISSUE TROPISM  
FOR DENDRITIC CELLS AND METHODS  
OF USE

**Confirmation No.:** 9509

**Examiner:** Unknown

**Group Art Unit:** 1636

**Attorney Docket No.:** 2578-4489.1US  
(0022 A US 01 DIV)

CERTIFICATE OF MAILING

I hereby certify that this correspondence along with any attachments referred to or identified as being attached or enclosed is being deposited with the United States Postal Service as First Class Mail on the date of deposit shown below with sufficient postage and in an envelope addressed to the Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

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Sir:

In compliance with the duty to disclose information material to patentability pursuant to 37 C.F.R. § 1.56, it is respectfully requested that this Supplemental Information Disclosure Statement be entered and the documents listed on attached Form PTO/SB/08 be considered by the Examiner and made of record. Copies of U.S. patents have been submitted electronically pursuant to Pre-OG Notices <<http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/idswouscopies.htm>> (visited 12/08/2004). Copies of the acknowledgement receipt, listing of

US references electronically submitted are attached. Copies of foreign patent documents and non-patent literature are enclosed pursuant to 37 C.F.R. § 1.98(a)(2).

Foreign Patent Documents

<u>Document No.</u>	<u>Publication Date</u>	<u>Patentee</u>
WO 96/00326	01/04/96	Reinert, Gary, L., Sr.
WO 96/12030	04/25/96	Rhone-Poulenc Rorer S.A.
WO 96/13598	05/09/96	The Trustees of the University of Pennsylvania
WO 96/24453	08/15/96	Withers, Graham, Rex
WO 96/35798	11/14/96	Introgene B.V.
WO 97/12986	04/10/97	Cornell Research Foundation, Inc.
WO 97/20575	06/12/97	The University of Alabama at Birmingham Research Foundation
WO 98/49300	11/05/98	Collateral Therapeutics
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This Supplemental Information Disclosure Statement is filed after the mailing date of the first Office Action on the merits.

Serial No. 10/646,449

This Supplemental Information Disclosure Statement was submitted in two parts. The U.S. references were submitted electronically to avoid the necessity of submitting paper copies. The Foreign references and Other references are submitted herewith with the electronic listing of U.S. references to be initialed by the Examiner. The Supplemental Information Disclosure Statement Fee should only be incurred once, since this paper submission constitutes part of the total submission. However, should it be determined that any fee is due, which has not been paid, the Office is authorized to withdraw the necessary funds from Trask Britt Deposit Account 20-1469.

Respectfully submitted,

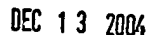


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Sheet	1	of	8
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*Complete if Known*

Application Number	10/646,449
Filing Date	August 22, 2003
First Named Inventor	Havenga et al.
Group Art Unit	1636
Examiner Name	Unknown
Attorney Docket Number	2578-4489.1US (0022 A US 01 DIV)

## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		WO 96/00326	01/04/96	Reinert, Gary, L., Sr.		
		WO 96/12030	04/25/96	Rhone-Poulenc Rorer S.A.		
		WO 96/13598	05/09/96	The Trustees of the University of Pennsylvania		
		WO 96/24453	08/15/96	Withers, Graham, Rex		
		WO 96/35798	11/14/96	Introgene B.V.		
		WO 97/12986	04/10/97	Cornell Research Foundation, Inc.		

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Substitute for form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<i>Complete if Known</i>	
				Application Number	10/646,449
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FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)				
		WO 99/58646	11/18/99	Genera S.P.A.		
		EP 1020529	11/19/99	Introgene B.V.		
		WO 00/03029	01/20/00	Introgene B.V.		
		WO 01/04334	01/18/01	Introgene B.V.		
		WO 01/90158 A1	11/29/01	Crucell Holland B.V.		
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**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		ABRAHAMSEN et al., "Construction of an Adenovirus Type 7a E1A' Vector," JOURNAL OF VIROLOGY, NOV. 1997, P. 8946-8951 Vol. 71, No. 11.	
		ANDERSON, Nature, "Human gene therapy," Apr. 1998, Vol. 392, pp. 25-30.	
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		BASLER et al., Sequence of the immunoregulatory early region 3 and flanking sequences of adenovirus type 35, 1996, Gene 170:249-254.	
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		DOUGLAS J T et al.: "Strategies to accomplish targeted gene delivery to muscle cells employing tropism-modified adenoviral vectors" Neuromuscular Disorders, Pergamon Press, GB, vol. 7, July 1997 (1997-07), pages 284-298, XP002079944 ISSN: 0960-8966.	
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		JOLLY; viral vector systems for gene therapy, 1994, Cancer Gene Therapy, vol. 1, No. 1: 51-64.	
		KANG et al., "Molecular Cloning And Physical Mapping Of The Dna Of Human Adenovirus Type 35," Acta Microbiologica Hungarica 36 (1), pp. 67-75 (1989).	
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Examiner  
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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of

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Application Number	10/646,449
Filing Date	August 22, 2003
First Named Inventor	Havenga et al.
Group Art Unit	1636
Examiner Name	Unknown
Attorney Docket Number	2578-4489 IUS (0022 A IUS 01 DIV)

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		PRINCE, "Gene Transfer: A Review Of Methods And Applications," Pathology (1998), 30, pp. 335-347.	
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Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		SHAYAKHMETOV et al., "Efficient Gene Transfer into Human CD34 <sup>+</sup> Cells by a Retargeted Adenovirus Vector," Journal Of Virology, Mar. 2000, p. 2567-2583.	
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Electronic Version 1.1

Stylesheet Version v1.1.1

<b>Title of Invention</b>	<b>GENE DELIVERY VECTORS PROVIDED WITH A TISSUE TROPISM FOR DENDRITIC CELLS AND METHODS OF USE</b>								
<b>Information Disclosure Statement</b>									
Submission Type:	10/646449								
Application Number:	*10/646449*								
EFS ID:	73986								
Server Response:									
<table border="1" style="width: 100%; border-collapse: collapse;"><thead><tr><th style="width: 20%;">Confirmation Code</th><th style="width: 80%;">Message</th></tr></thead><tbody><tr><td>ISVR1</td><td>Submission was successfully submitted – Even if Informational or Warning Messages appear below, please do not resubmit this application</td></tr><tr><td>ICON1</td><td>9509</td></tr><tr><td>USPTOEFSNotice</td><td>The documents provided in this submission were accepted by the USPTO. However, the fees associated with new utility and provisional Electronic Filing System (EFS) submission were not accepted by our automated systems because the USPTO software has not yet been updated for the fee structure and amounts required by the Consolidated Appropriations Act, 2005, Section 801, of Division B. In due course a corrected fee may be assessed due to changes associated with the Appropriations Act. We will charge the amount indicated in your submission. If at least the basic filing fee accompanied a new utility or provisional EFS submission, then no surcharge based on fee deficiency will be applied when any fee deficiency is paid. For assistance with e-filing a patent application, contact the Patent Electronic</td></tr></tbody></table>		Confirmation Code	Message	ISVR1	Submission was successfully submitted – Even if Informational or Warning Messages appear below, please do not resubmit this application	ICON1	9509	USPTOEFSNotice	The documents provided in this submission were accepted by the USPTO. However, the fees associated with new utility and provisional Electronic Filing System (EFS) submission were not accepted by our automated systems because the USPTO software has not yet been updated for the fee structure and amounts required by the Consolidated Appropriations Act, 2005, Section 801, of Division B. In due course a corrected fee may be assessed due to changes associated with the Appropriations Act. We will charge the amount indicated in your submission. If at least the basic filing fee accompanied a new utility or provisional EFS submission, then no surcharge based on fee deficiency will be applied when any fee deficiency is paid. For assistance with e-filing a patent application, contact the Patent Electronic
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First Named Applicant: Menzo Havenga

Attorney Docket Number: 2578-4489.1US

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# ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

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Title of  
Invention

**GENE DELIVERY VECTORS PROVIDED WITH A TISSUE  
TROPISM FOR DENDRITIC CELLS AND METHODS OF USE**

Application Number: 10/646449

\*10/646449\*

Confirmation Number: 9509

First Named Applicant: Menzo Havenga

Attorney Docket Number: 2578-4489.1US

Art Unit: 1636

Search string: ( 5837511 or 5846782 or 5849561 or 5856152 or  
5871727 or 5871982 or 5877011 or 6033908 or  
6057155 or 6100086 or 6287857 or 6306652 or  
6486133 or 6492169 or 6669942 or 5994128 ).pn.

## US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	5837511	1998-11-17	Flack-Pedersen et al.			
	2	5846782	1998-12-08	Wickham et al.			
	3	5849561	1998-12-15	Flack-Pedersen et al.			
	4	5856152	1999-01-05	Wilson et al.			
	5	5871727	1999-02-16	Curiel			
	6	5871982	1999-02-16	Wilson et al.			
	7	5877011	1999-03-02	Armentano et al.			
	8	6033908	2000-03-07	Bout et al.			
	9	6057155	2000-05-02	Wickham et al.			
	10	6100086	2000-08-08	Kaplan et al.			
	11	6287857	2001-09-11	O'riordan et al.			
	12	6306652	2001-10-23	Fallaux et al.			

	13	6486133	2002-11-26	Herlyn et al.
	14	6492169	2002-12-10	Vogels et al.
	15	6669942	2003-12-30	Perricaudet et al.
	16	5994128	1999-11-30	Fallaux et al.

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